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| 10/072,728 | 02/07/2002 | Chester L. Schuler | IMMR-0043E (034701-068) | 2651 |
| 60140 | 7590 | 12/11/2008 | | EXAMINER |
| IMMERSION - NIXON PEABODY LLP | | | | KUMAR, SRILAKSHMI K |
| 200 Page Mill Road | | | ART UNIT | PAPER NUMBER |
| Palo Alto, CA 94306 | | | 2629 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|----------------------------------------|---------------------------------------|
| Office Action Summary | Application No. 10/072,728 | Applicant(s) SCHULER ET AL. |
| | Examiner SRILAKSHMI K. KUMAR | Art Unit 2629 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 August 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 19-25 and 27-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 19-25 and 27-33 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/1450/B)
 Paper No(s)/Mail Date 8/2008

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

The following office action is in response to the request for reconsideration, filed on August 11, 2008. Claims 19-25, 27-33 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 19-25, 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh (US 5,103,404) in view of Koma et al (H5-192449).

In reference to claims 19, 25, 31 and 33, McIntosh teach a device comprising a moveable member (Fig. 2); an actuator having a user interface (col. 4, lines 37-41), the actuator being configured to output haptic feedback (col. 4, lines 37-41), the haptic feedback including a modulating force (col. 2, lines 49-54, col. 3, lines 1-30); a data storage component configured to store torque data associated with the haptic feedback (col. 10, lines 46-53), the torque data being associated with a plurality of force profiles (col. 2, lines 49-54), the torque data being provided by a host computer (col. 10, lines 24-25) based on a selection of at least one force profile from the plurality of force profiles (col. 10, lines 24-25); a sensor coupled to the moveable member (col. 7, lines 50-57), the sensor being configured to send position information associated with a position of the moveable member (col. 7, lines 50-57); a local controller coupled to the data storage component (RAM and ROM) and the actuator (Fig. 10), the local controller being configured to be in communication with the host computer (col. 10, lines 24-25); the local

controller being configured to send a control signal to the actuator, the control signal being based on data values associated with a host software application of the host computer, the haptic feedback simulating a plurality of electronically defined stop positions being associated with the position information and the host software application (in column 2, lines 49-54, McIntosh teaches that the “the motion of (the) motor, is determined by either operator controlled movements of the control motor or preprogrammed motion instructions” i.e. a force profile. More specifically, he teaches “the manipulator motor is driven to its desired position as determined by the control motor, or in some cases, preprogrammed instructions” and “that the system provides a readily programmable degree of coupling between the two motors” in column 3, lines 1-30).

McIntosh does not disclose wherein the haptic feedback including a modulating force simulating a plurality of electronically defined stop positions. Koma et al teach a feedback type of input device for gaming purposes. Koma et al teach using gun input devices in game playing, where the guns provide an electronically simulated kickback/vibration to emulate the firing of a real gun. This electrically simulated kickback is an obvious variation of electrically defined stop positions. Therefore it is obvious to one of ordinary skill in the art at the time the invention was made to include the electrical simulations as taught by Koma et al into the prior art of McIntosh as the electrical stops provide the user with a real feel of inputs

In reference to claim 20, McIntosh teaches the actuator being a first actuator (first motor), the device further comprising a second actuator (second motor), the local controller being configured to output the control signal to the first and second actuators, the first and second actuators configured to produce the haptic feedback (column 2, lines 42-43, the first and second

actuators are taught by the use of the two motors which further provide haptic feedback the use of two motors for performing feedback).

In reference to claim 21, McIntosh teaches wherein the data storage component is configured to receive and store a plurality of torque value from the host computer (in col. 10, lines 5-8, where the data storage component is capable of storing and recalling information, and in col. 4, lines 37-41, where different levels of selected forces are associated with different types of feedback sensations).

In reference to claims 22 and 32, in column 4, lines 37-41, McIntosh teaches wherein each of the torque values is associated with a different tactile sensation (in col. 10, lines 5-8, where the data storage component is capable of storing and recalling information, and in col. 4, lines 37-41, where different levels of selected forces are associated with different types of feedback sensations). .

In reference to claims 23 and 28, as shown in figure 10, McIntosh teaches the data storage component is external to the local controller (col. 10, lines 5-8).

In reference to claims 24 and 29, as shown in figure 10, McIntosh does not explicitly state wherein the data storage component is resident on the local controller. McIntosh teaches the RAM and ROM components are external to the microprocessor (item 61). However, Examiner takes Official Notice that the data storage component is resident on the local controller is well known in the art. It would have been obvious for one skilled in the art to include a controller with an internal storage component in order to reduce the number of parts needed to fabricate the invention. This feature of where the RAM and ROM are internal to the processor is evidenced

by Sanderson (US 4,768,412) in col. 10, lines 56-66 where a microprocessor is taught to internally include the RAM and ROM.

In reference to claim 27, McIntosh teaches that he moveable member is a portion of a actuator (column 4, lines 37-41).

In reference to claim 30, McIntosh's storage component (figure 10, item 65) receives data from a remote processor (item 26).

Response to Arguments

3. Applicant's arguments, see arguments, filed August 11, 2008, with respect to the rejection(s) of claim(s) 19-25, 27-33 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Koma et al H5-192449.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRILAKSHMI K. KUMAR whose telephone number is (571)272-7769. The examiner can normally be reached on 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Srilakshmi K Kumar/
Examiner
Art Unit 2629

SKK
December 6, 2008